

Work Order ID 72059

Monday, July 18, 2011 3:27:59 PM

Page 1

Item ID: D4424-041

Revision ID: PRELIM

Item Name: Base Assembly

Start Date: 7/19/2011 Start Qty: 1.00

Required Date: 7/22/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4424	PAI

100



Waterjet

FLOW CNC Waterjet

Memo

CUT AS PER FILE D4424-1

PROG REV: A

DWG REV: A

DEBURR

0.00

0.00

11/07/28

1

110



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

0.00

11/07/28

1

**PRELIMINARY
ISSUE**

ASAP Aug 3






7/22/11-07-18



okp Aug 3




Work Order ID 72059

Monday, July 18, 2011 3:27:59 PM

Page 2

Item ID:	D4424-041	Accept		Setup	Start	
Revision ID:	PRELIM				Stop	
Item Name:	Base Assembly					
Start Date:	7/19/2011	Start Qty:	1.00		Cust Item ID:	
Required Date:	7/22/2011	Req'd Qty:	1.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				W	11	01	28 (1) Inspected to Rev A Dwg
130  Mill Conv Conventional Milling Machine	 Memo MILL SLOTS AS PER DWG	0.00 0.00							11/08/02 1
140  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB all Memo	0.00 0.00							Swoblog (1)

Work Order ID 72059

Monday, July 18, 2011 3:27:59 PM



Page 3

Item ID: D4424-041

Accept



Setup Start



Revision ID: PRELIM

Stop



Item Name: Base Assembly

Start Date: 7/19/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

1 0 11/08/07

155



Powdercoat

Powder Coating

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

11/15/28

Memo

0.00

mask all holes and bottom of slots

START 8:30AM
Temp 320°F
Fin: 9:00AM

1 0 11/08/03

160



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

1X 0 11/08/03

Work Order ID 72059

Monday, July 18, 2011 3:27:59 PM

Page 4

Item ID: D4424-041

Accept

Revision ID: PRELIM

Item Name: Base Assembly

Start Date: 7/19/2011 Start Qty: 1.00

Required Date: 7/22/2011 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

0.00



Small Fab

Memo

0.00

Small Fab

Assemble as per dwg

Not Assembled.

180

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

190

0.00



Identify as per dwg & Stock Location: _____

Packaging

Memo

0.00

Packaging

*Ship short
per
Bridgette**11- P44/3*

Dart Aerospace Ltd

W/O: 72059 72059		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4424-041 PAR #: _____ Fault Category: Machining NCR: Yes No DQA: _____ Date: _____

Resolution: Scrap Disposition: Scrap QA: N/C Closed: _____ Date: _____

NCR: 72059		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
w/s/3	#170	Found at assembly that D4424-3 B72060 was cut wrong. RL operate was not pay attention	U 11/08/03	Scrap + Destroy. Replac B72630 issue who to Replac D4424-3	SB 11/08/03	S 11/08/03	U 11/08/03	S 11/08/03
		to Dug. LQA + inspect wrong.						

NOTE: Date & initial all entries

Work Order ID 72059

Monday, July 18, 2011 3:27:59 PM

Page 5

Item ID: D4424-041

Accept

Revision ID: PRELIM

Item Name: Base Assembly

Start Date: 7/19/2011 Start Qty: 1.00

Required Date: 7/22/2011 Req'd Qty: 1.00

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

OK 11/08/03

11-08-3
C

Picklist Print

Monday, July 18, 2011 3:27:55 PM

Page 1

Work Order ID: 72059

Parent Item: D4424-041

Parent Item Name: Base Assembly

Start Date: 7/19/2011

Required Date: 7/22/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 11-07-18 JLM VERIFIED BY:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6B0.500X24.00
0.

Purchased

No

100

f

2.5000

2.5

2.631579



6061-T6 BAR .500" X 24.000"

Location

Loc Qty

Loc Code

MAT20

118400

2.5

2.5

170

Each

0.0000

2

2.6 11/07/28

D4424-3

Manufactured

No

Seat Rail

33115

Purchased

No

170

Each

0.0000

4

4

Stud Fitting

MS21042L3

Purchased

No

170

Each

1,618.000

12

12

Nut

Location

Loc Qty

Loc Code

ST300

1618

117441

786

117601

400

117885

432

12

ship later
on
per Harvey 11.08.03

372060

3x 118536 shipped direct to Eagle
1x 118567

11/8/3

Picklist Print

Monday, July 18, 2011 3:27:55 PM

Work Order ID: 72059

Parent Item: D4424-041

Parent Item Name: Base Assembly

Start Date: 7/19/2011

Required Date: 7/22/2011

Start Qty: 1.00

Required Qty: 1.00

MS21042L6

Purchased

No

170

Each

317.0000

4



Nut

Location

Loc Qty

Loc Code

ST300

317

117343

17

117677

200

118078

100

MS24694-S51

Purchased

No

170

Each

91.0000

8



Screw

Location

Loc Qty

Loc Code

ST289

91

116805

91

MS35207-264

Purchased

No

170

Each

55.0000

4



Screw

Location

Loc Qty

Loc Code

ST295

55

116997

55

NAS1149D0363J

Purchased

No

170

Each

3,006.000

16



Washer

Location

Loc Qty

Loc Code

ST298

3006

117291

31

117505

500

117601

475

118077

2000

Picklist Print

Page 3

Monday, July 18, 2011 3:27:55 PM

Work Order ID: 72059



Parent Item: D4424-041



Parent Item Name: Base Assembly

Start Date: 7/19/2011

Required Date: 7/22/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0663J

Purchased

No

170

Each

639.0000

4

4



M118318 f 11/3/3

Washer

Location

Loc Qty

Loc Code

ST298

639

115996

5

117291

134

117977

500

M 6061 T6 B 0.500 X 24.00

M 118400

11/11/07/28

DART AEROSPACE LTD		Work Order: 72059
Description: BASE		Part Number: 4424-1
Inspection Dwg: 4424	Rev: A	Page 1 of 1

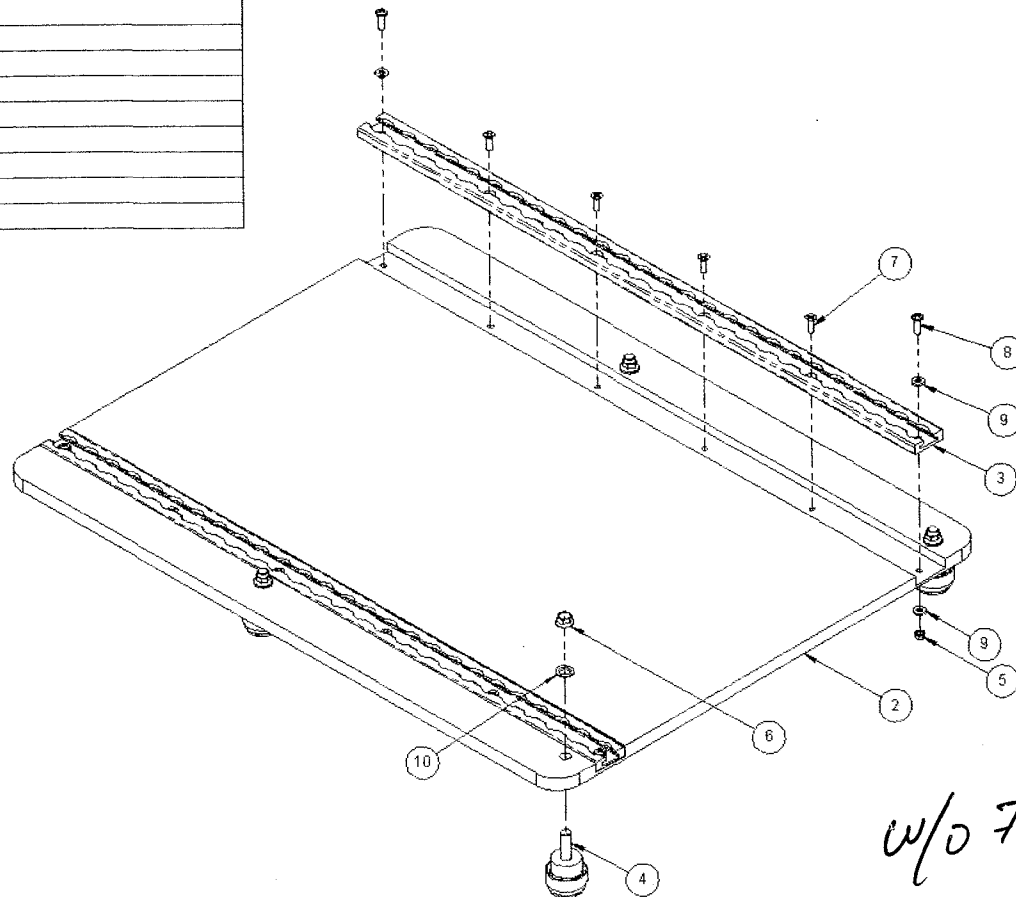
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
26.00	$\pm .030$	26.00	—		RA04	TAPE
20.00	$\pm .030$	20.00	—		"	"
17.250	$\pm .030$	17.250	—		"	"
15.000	$\pm .010$	15.000	—		"	"
1.38	$\pm .030$	1.382	—		RA26	Vern
2.50	$\pm .030$	2.511	—		RA26	
5.000	$\pm .010$	5.004	—		RA26	Vern
1.50	$\pm .030$	1.518	—		RA26	"
1.00	$\pm .030$	1.003	—		"	"
Ø.1386	$\pm .006$.1386	—		RA26	Vern
Ø.189	$\pm .004$.1890	—		"	Vern
1.38	$\pm .030$	1.384	—		RA26	
1.375	$\pm .010$	1.380	—		"	
1.81	$\pm .030$	1.816	—		"	Vern
15.000	$\pm .010$	15.000	—		RA04	TAPE

Measured by: <i>[Signature]</i>	Audited by: <i>[Signature]</i>	Prototype Approval:
Date: 11/07/28	Date: 11/07/28	Date:
Rev	Date	Change
A		New Issue
Revised by	Approved	
KJ/JLM		

ITEM NO.	QTY. 041	PART NUMBER	DESCRIPTION
1	X	D4424-041	BASE ASSEMBLY
2	1	D4424-1	BASE
3	2	D4424-3	TRACK
4	4	33115	STUD FITTING
5	12	MS21042L3	NUT
6	4	MS21042L6	NUT
7	8	MS24694-S51	SCREW
8	4	MS35207-264	SCREW
9	16	NAS1149D0363J	WASHER
10	4	NAS1149D0663J	WASHER



D4424-041 BASE ASSEMBLY

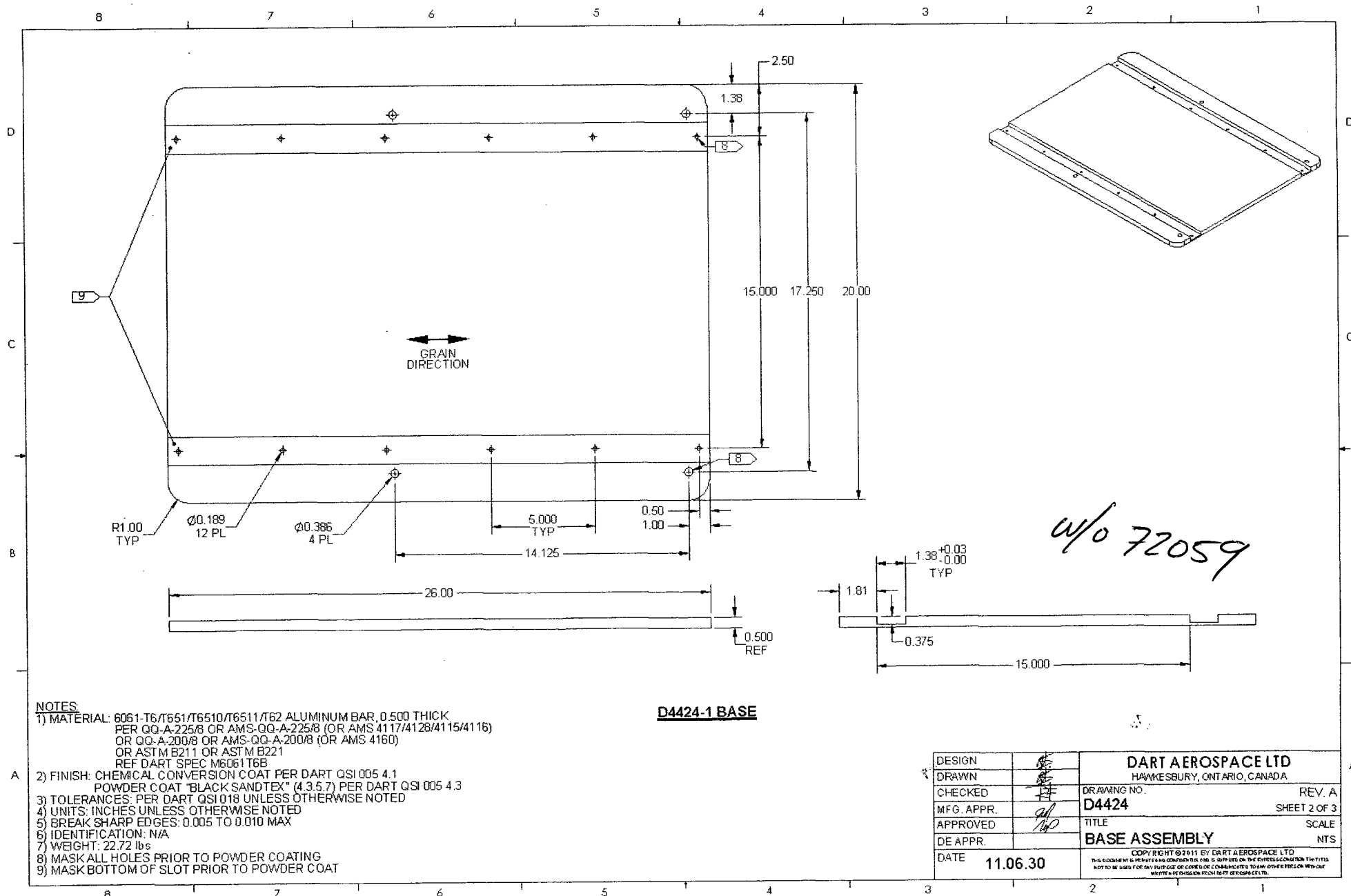
NOTES:

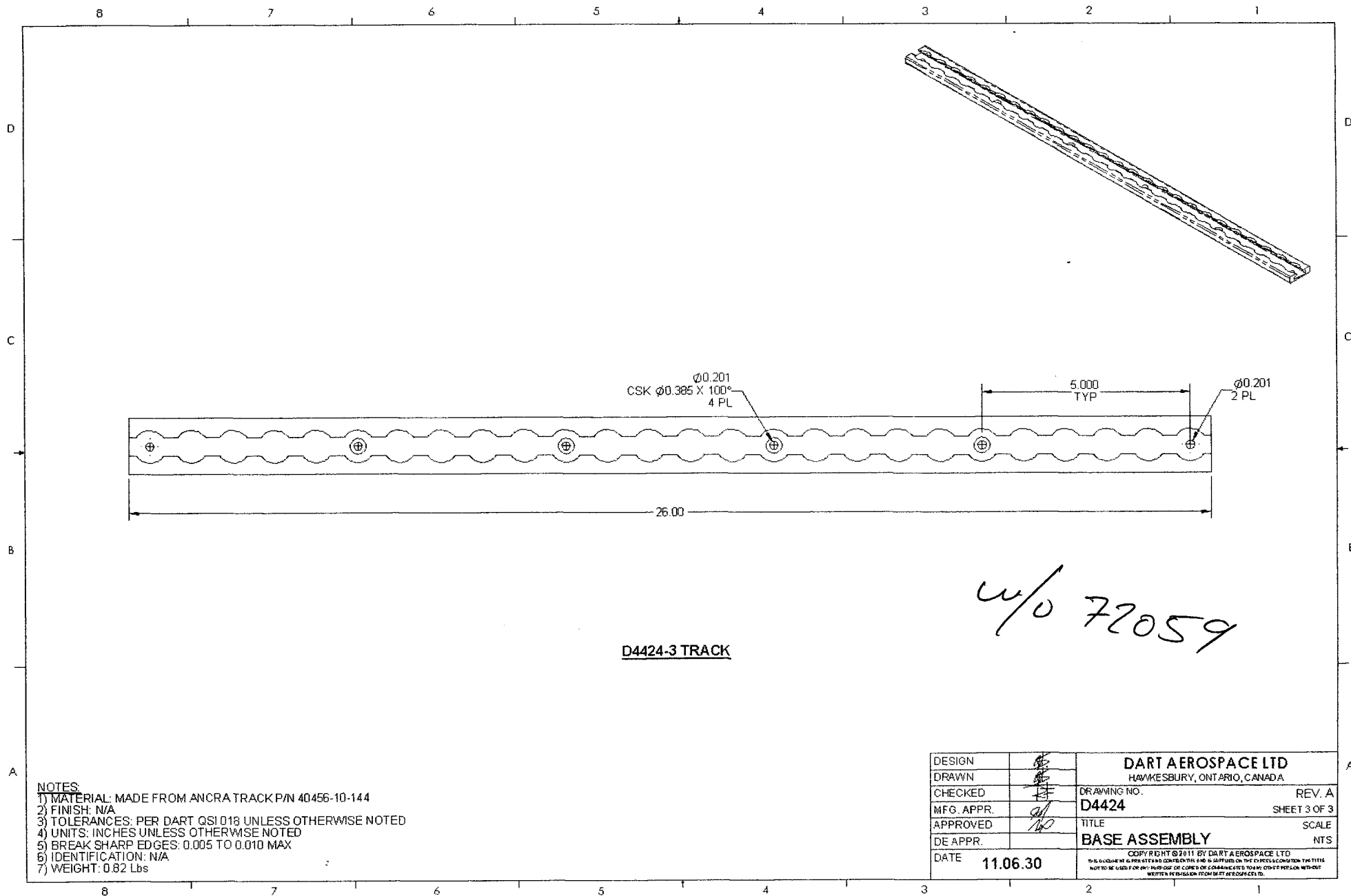
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 24.95 lbs

A	NEW ISSUE	BY	10.06.30
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.06.30		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4424	REV. A
TITLE BASE ASSEMBLY	SHEET 1 OF 3
SCALE NTS	
COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD AND IS LOANED TO THE CUSTOMER FOR THE PURPOSES OF THE TITLE NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

w/o 72059





D4424-3 TRACK

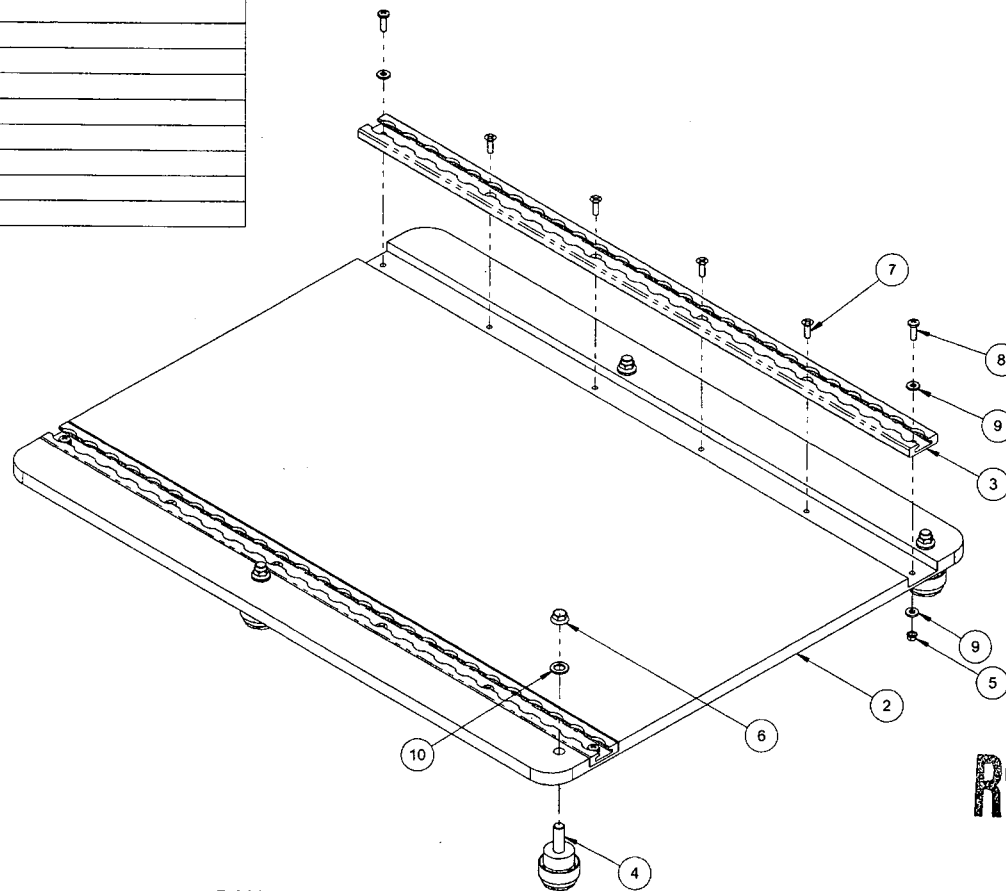
NOTES:

- 1) MATERIAL: MADE FROM ANCRA TRACK P/N 40456-10-144
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.82 Lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4424	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		BASE ASSEMBLY	NTS
DATE	11.06.30	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED OR DISCLOSED TO THE PUBLIC WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

w/o 72059

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4424-041	BASE ASSEMBLY
2	1	D4424-1	BASE
3	2	D4424-3	TRACK
4	4	33115	STUD FITTING
5	12	MS21042L3	NUT
6	4	MS21042L6	NUT
7	8	MS24694-S51	SCREW
8	4	MS35207-264	SCREW
9	16	NAS1149D0363J	WASHER
10	4	NAS1149D0663J	WASHER



D4424-041 BASE ASSEMBLY

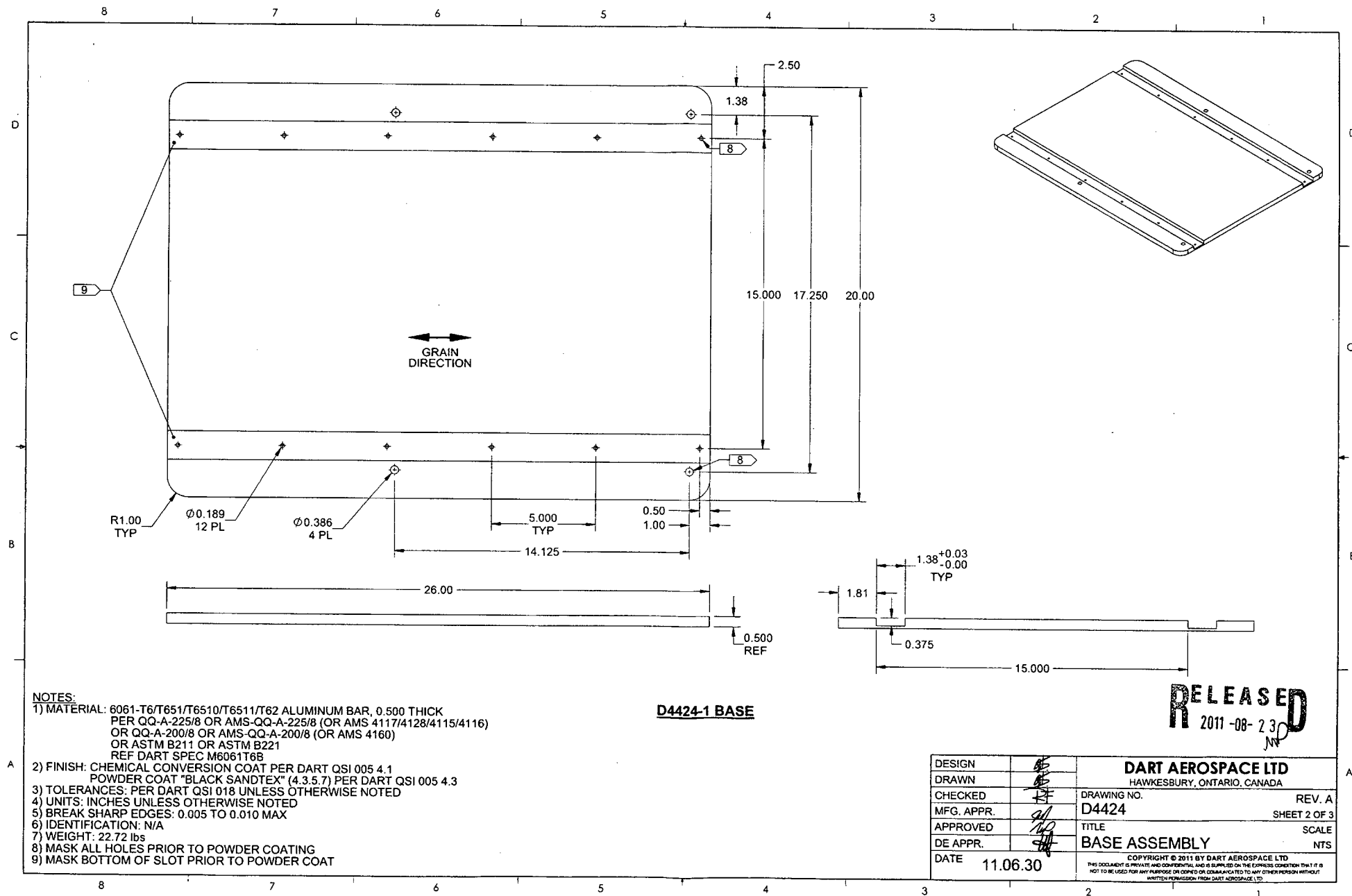
NOTES:

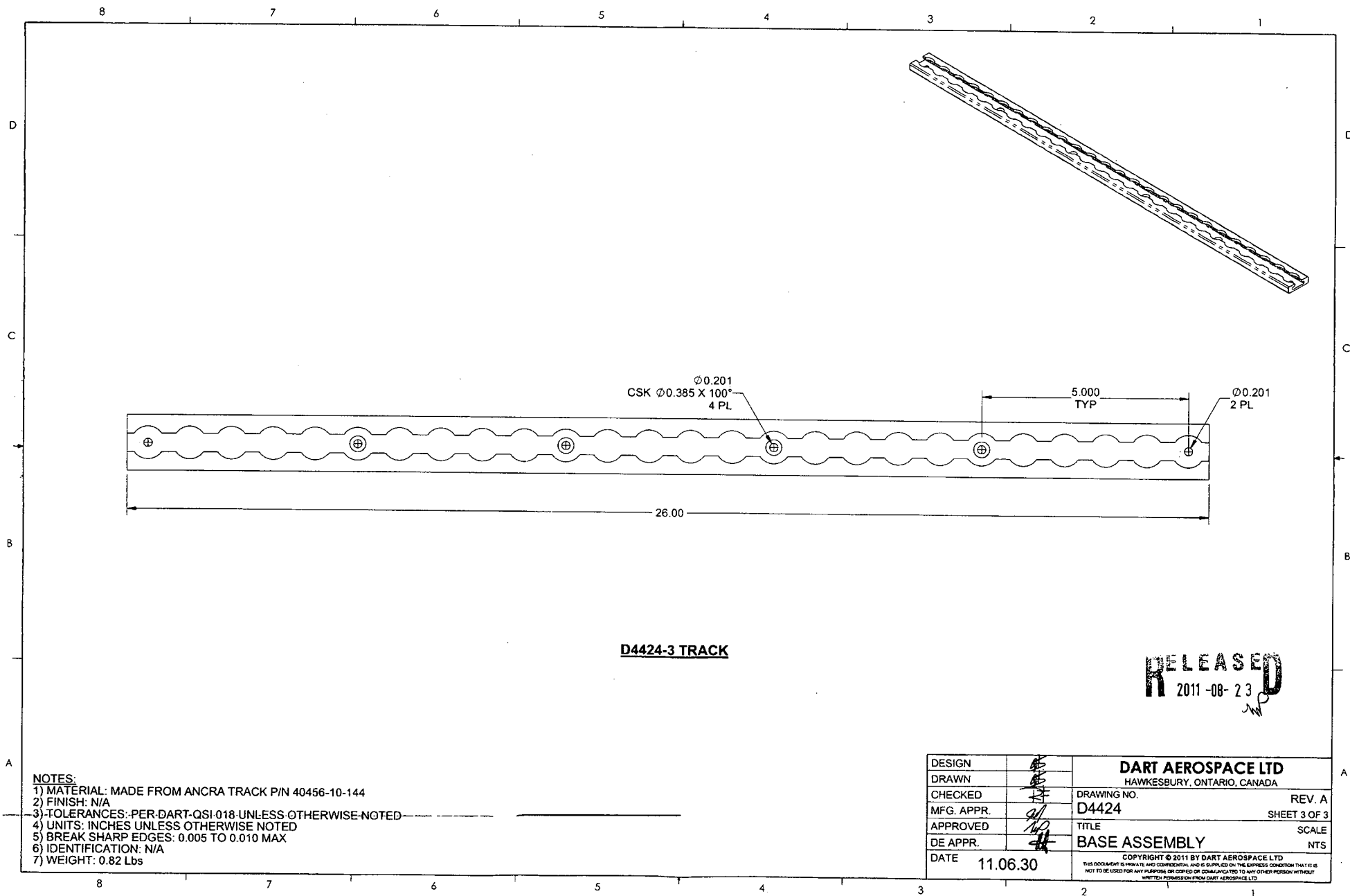
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 24.95 lbs

RELEASED
2011-08-23

A	NEW ISSUE	BY	10.06.30
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.06.30		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4424	REV. A
TITLE BASE ASSEMBLY	SCALE NTS
COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	





- NOTES:**
- 1) MATERIAL: MADE FROM ANCRA TRACK P/N 40456-10-144
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART-QSI-018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.82 Lbs

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4424	REV. A
MFG. APPR.	<i>[Signature]</i>	SHEET 3 OF 3	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BASE ASSEMBLY	NTS
DATE	11.06.30	<small>COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

RELEASED
2011-08-23